DETAILED ACTION

The amendment filed 2-1-07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Para 16.1 is new matter to the extent of "inversely related".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claims 8,10,12-14,18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 8, where is there support for "determined to be deficient if a jitter value measured after scratching the optical disc is over 10%" (last two lines of claim 8)? Please note that the single horizontal dashed line in Figure 6 does not seem related to a threshold of failure. That is especially, though not exclusively so, as the two solid circle points above the dashed (fail?) line are not tagged "Fail" as is done for the two triangle points also above the so called dashed)fail?) line. The single dashed line is just there, *with both "Fail" and non-fail points above the dashed line.* How is endurance a function

of jitter, when some points (i.e. the two solid dots above the dashed line in Figure 6) have greater than 10% jitter and are not deemed to be indications of failure?

As to **REMARKS**, consider:

As to p. 5, second paragraph; the original disclosure does not seem to refer to false positives. The original disclosure illustrates (Figure 6) that points above 10% jitter may or may not be "Fail" points. Oddly, the originally filed Figure 6 illustrates only 1 failing point (solid, upside down triangle) that has undergone actual rotation (that is "up to five rotation turns"), and that point is located at about 4 rotation turns, and has about a 10.5% jitter. In that regard, where is there support that the connection between "up to 5 rotations or less" and a "10% "reference line? There does not appear to be any. At present, there seems to be only a single fail threshold of at most 10.5% jitter (as that is exactly where the point is in Figure 6, and it is indicated as a "FAIL" point) for a sample that has rotated no more than 5 rotations. The point is not originally connected with a 10% threshold! The connection between "up to five rotation turns" and "10%" in claim 8 is unsupported. The Undersigned simply can not stress that enough. Applicant may not just pick out *any number* along the ordinate of Figure 6, and call that his threshold. He must have support for a *specific number*.

Claims 18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 18, "symbol error rate" is undefined. *How is this used to determine efficiency if jitter value is over 10%, as called for in base claim 8? In fact, how is the rate defined, how is it determined/ measured, and how is it used to determine deficiency?*

As to claim 19, "bit error rate" is undefined. *How is this used to determine efficiency if jitter value is over 10%, as called for in base claim 8? In fact, how is the rate defined, how is it determined/measured, and how is it used to determine deficiency?*

As to claim 20, "servo error signal" is undefined. *How is this used to determine efficiency if jitter value is over 10%, as called for in base claim 8? In fact, how is the rate defined, how is it determined/ measured, and how is it used to determine deficiency?*

As to claim 21, "tracking error signal" is undefined. *How is this used to determine efficiency if jitter value is over 10%, as called for in base claim 8? In fact, how is the tracking error signal defined, how is it determined/measured, and how is it used to determine deficiency?*

As to **REMARKS**, consider:

As to pages 6-7; if claim 8 determines "deficiency" based upon turns and jitter, what are these optional tests for? (Again, *how is this used to determine deficiency*

if jitter value is over 10%, as called for in base claim 8?) Why make a measurement in a second way (or phase, if you will) when the first way (less than 5 turns, and 10% jitter) already determined deficiency? (One might presume that is has something to do with the "functions" (Para 29) that are optionally tested.) Over all, the record does not define what the terms ("symbol error rate", "bit error rate", "servo error signal" and "tracking error signal") physically mean, what is used to make an actual numerical (i.e. meaningful) measurement, and how that measurement may "test the functions of the optical disc". Please cancel claims 18-21.

Claims 8,10,12-14,18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida et al.

As to claim 8, Hayashida et al teach (Para 91) a method to test endurance of an optical disc, including: placing the disc on a turntable; rotating the turntable and disc; applying pressure to the disc using a scratching unit (abrasive wheels) while the disc rotates a number of turns, so as to scratch the surface of the disc; and ascertaining the abrasion resistance of the sample, said resistance indicative of endurance. Force applied to the disc from above employs a pressure that is applied in the vertical direction. Jitter less than 10% is in the "satisfactory range" (Para 154).

Hayashida does not refer to "up to five" rotation turns.

As to claim 8, it would have been obvious to employ up to five rotation turns as TABLE 3 illustrates use of 5 abrasion cycles, while relating the cycles to the "rotating

the turntable" (Para 91), suggestive of turning the specimen of interest 5 rotations during testing.

Hayashida refers (Para 91) to a range of cycles under a range of loads, but does not base one (loads) on the other (cycles).

As to claim 10, it would have been obvious to apply a reduced load for a greater number of cycles as it would be desirable to assure that the wheels do not fully pass through the disc of interested, to thus permit for a measurement of a parameter (i.e. the change of thickness" (Para 94)) that's indicative of abrasion resistance.

As to claim 12,13, it would have been obvious to employ a non-rotating test piece (in place of a wheel) in Hayashida as Hayashida teaches (Para 90,92) that steel wool may effectively permit for abrasion testing of a rotating body. Such a test piece must provide for a sufficient force/area ration to provide for a measure of abrasion. The pressure provided in Applicant's claim 12 is within the range of sufficient pressures, especially as Nakagawa's test piece is non-rotating, just like Applicant's.

As to claim 14, Hayashida suggests (Para 94) depth measurement as a means to evaluate abrasion resistance. In addition, one of ordinary skill would provide for reference values indicative of whether resistance for a particular disc is acceptable. The threshold value provided in Applicant's claim 14 seems to be within one of ordinary skill.

As to claims 18-21, it would have been obvious to employ these particular tests for endurance **only because** Applicant has expressed that they are "**well-known in the**

art" (line 3 from bottom of p. 8 of REMARKS filed 7-14-08) in the field related to "test the function of the optical disc" (Para 39 of written specification), especially as it is known to test an item on a production line to assure that the line is operating properly.

As to **REMARKS**, please consider the following:

As to p. 9, last paragraph; while the specification of Hayashida '975 reference does not employ the phrase "up to 5", he certainly employs 5 cycles as depicted in the "Abrasion cycles" row of TABLE 3 which expressly employs "5" rotations for testing. While the claim does not call for -- up to and including 5--, Hayashida's "5" sure seems to be darn close. In that regard, it's interesting to note that the listed data (of TABLE 3) employs only round cycle numbers (i.e. 0, 5, 10, 20, 40, 30, 100, 500), which does not necessarily expressly exclude use of a numbers such at 7, 13, 30, 50, 90, etc, or even a number less than 5 in any "cycle test" that employs rotation. It's just natural to employ/list integral (round) numbers in a test. Applicant's invention seems to be directed to ceasing rotation at a number in-between, or in this case before "5" is reached. (Incidentally, that would make one consider if use of any numerical range between (but not including) any of the round cycle numbers (i.e. 0, 5, 10, 20, 40, 30, 100, 500) employed in the reference qualify as a patentable invention.)

References #2 and #4 were crossed off as they have already been recorded in the record, and are duplicates.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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/Robert R. Raevis/

Primary Examiner, Art Unit 2856